

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

YOUNG-HO CHO

Serial No.:

09/382,681

Examiner:

A. Matar

Filed:

25 August 1999

Art Unit:

2742

For:

SUBSCRIBER LINE INTERFACE CIRCUIT OF EXCHANGE SYSTEM

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231 JAN 0 8 2003

Technology Center 2600

Sir:

Pursuant to 37 CFR §§1.56, 1.97 and 1.98, Applicant cites, provides copies and briefly discusses the following art references:

U.S. PATENT REFERENCES

	Publication No.	Inventor(s)	<u>Publication Date</u>
✓	5,881,129	Chen et al.	03/1999
✓	5,854,839	Chen et al.	12/1998
✓	4,538,031	Benning et al.	08/1985
✓	4,465,903	Barber	08/1984

OTHER DOCUMENTS

✓ Notice of Allowance and Fee Due (PTOL-85 issued by the U.S. PTO in co-pending

continuation-in-part application serial no. 09/384,083 (Art Unit 2643) by Examiner Binh Kien Tieo.

DISCUSSION

Chen et al. '129 and '839 discloses a four-wire line circuit with the components of that circuit selectively controllable by a microprocessor/digital signal processor to provide normal battery feed, over-voltage protection, ringing, supervision of the loop, coding/decoding and the hybrid function of connection between a two-wire subscriber line and a four-wire network, as well as testing. A level shifting circuit disposed between the codec analog output and the input to the line driving amplifiers, establishes a DC level for the signal applied to the loop so as to preserve the dynamic range of the codec signal irrespective of which battery is connected to supply the loop.

Benning '031 uses a controller to respond to a ringing signal received from the local switching office via the tip and ring leads, to address each of the amplifiers associated with speakers, and to apply the ringing tone for amplification, thereby broadcasting "a pleasant ringing tone" throughout the house in the environment of each of the speakers.

Barber '904 uses a field-effect transistor as an electronic hookswitch, with passive voltage surge protection and current surge protection devices employed in conjunction with the FET hookswitch, in order to protect interface circuitry as well as the electronic system. The combination of the FET hookswitch and current detection circuit comprises an active series-connected protection circuit that permits the FET to operate in a linear mode as a current limiting device.

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Pursuant to 37 CFR §1.97(e)(2), "no item of information contained in the Information

Disclosure Statement was cited in a communication from a foreign patent office in a counterpart

foreign application, and, to the knowledge of the person signing this certification after making

reasonable inquiry, no item of information contained in the Information Disclosure Statement was

known to any individual designated in §1.56(c) more than three months prior to the filing of the

Information Disclosure Statement."

Υ.

The citation of the foregoing references is not intended to constitute an assertion that other

or more relevant art does not exist. Accordingly, the Examiner is requested to make a wide-ranging

and thorough search of the relative arts.

No fee is incurred by the filing of this Information Disclosure Statement. Should any fee

remain or be required for filing of this Information Disclosure Statement, the Commissioner is

authorized to charge the Deposit Account No. 02-4943 and advise the undersigned attorney

accordingly.

Respectfully submitted,

Reg. No.: 27,774

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Folio: P55792

Date: 7 January 2003

I.D.: REB/wc

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